Hawksbill Sea Turtle (Eretmochelys imbricata)

FAMILY: Cheloniidae

STATUS: Endangered throughout its range (*Federal Register*, June 2, 1970).

DESCRIPTION: The hawksbill is a small to medium-sized marine turtle having an elongated oval shell with overlapping scutes on the carapace, a relatively small head with a distinctive hawk-like beak, and flippers with two claws. General coloration is brown with numerous splashes of yellow, orange, or reddish-brown on carapace. The plastron is yellowish with black spots on the intergular and postanal scutes. Juveniles are black or very dark brown with light brown or yellow coloration on the edge of the shell, limbs, and raised ridges of the carapace. As an adult, the hawksbill may reach up to 3 feet in length and weigh up to 300 pounds, although adults more commonly average about $2\frac{1}{2}$ feet in length and weigh between 95 to 165 pounds. It is the only sea turtle with a combination of two pairs of prefrontal scales on the head and four pairs of costal scutes on the carapace. The hawksbill feeds primarily on sponges and is most often associated with the coral reef community.

REPRODUCTION AND DEVELOPMENT: The nesting season varies with locality, but in most locations nesting occurs sometime between April and November. Hawksbills nest at night and, on average, about 4.5 times per season at intervals of approximately 14 days. In Florida and the U.S. Caribbean, clutch size is approximately 140 eggs, although several records exist of over 200 eggs per nest. Remigration intervals of 2 to 3 years predominate. The incubation period averages 60 days. Hawksbills are recruited into the reef environment at about 35 cm in length and are believed to begin breeding about 30 years later. However, the time required to reach 35 cm in length is unknown and growth rates vary geographically. As a result, actual age at sexual maturity is not known.

RANGE AND POPULATION LEVEL: The hawksbill is found in tropical and subtropical regions of the Atlantic, Pacific, and Indian Oceans. The species is widely distributed in the Caribbean Sea and western Atlantic Ocean. In contrast to all other sea turtle species, hawksbills nest in low densities on scattered small beaches. The Gulf and Caribbean coasts of the Yucatán Peninsula, Mexico, where hawksbills nest on long expanses of beach in densities of 20 to 30 nests/km, are exceptions. The hawksbill sea turtle has experienced global population declines of 80 percent or more during the past century and continued declines are projected. Most populations are declining, depleted, or remnants of larger aggregations. Only five regional populations remain with more than 1,000 females nesting annually (Seychelles, Mexico, Indonesia, and two in Australia). About 15,000 females are estimated to nest each year throughout the world with the Caribbean accounting for 20 to 30 percent of the world's hawksbill population. Panama, which used to support the single most important nesting population in the Caribbean, is only a remnant population. Mexico is now the most important region for hawksbills in the Caribbean with 3,000 to 4,500 nests/year. Other significant but smaller populations in the Caribbean still occur in Martinique, Jamaica, Guatemala, Nicaragua, Grenada, Dominican Republic, Turks and Caicos Islands, Cuba, Puerto Rico, and U.S. Virgin Islands. In the U.S. Caribbean, about 100 to 350 nests/year are laid on Mona Island, Puerto Rico, and 60 to 120 nests/year on Buck Island Reef National Monument, U.S. Virgin Islands. In the U.S. Pacific, hawksbills nest only on main island beaches in Hawaii, primarily along the east coast of the island of Hawaii. Hawksbill nesting has also been documented in American Samoa and Guam.

HABITAT: Hawksbills frequent rocky areas, coral reefs, shallow coastal areas, lagoons or oceanic islands, and narrow creeks and passes. They are seldom seen in water deeper than 65 feet. Hatchlings are often found floating in masses of sea plants, and nesting may occur on almost any undisturbed deep-sand beach in the tropics. Adult females are able to climb over reefs and rocks to nest in beach vegetation.

CRITICAL HABITAT: 50 CFR 17.95 Puerto Rico: (1) Isla Mona. All areas of beachfront on the west, south, and east sides of the island from mean high tide inland to a point 150 meters from shore. This includes all 7.2 kilometers of beaches on Isla Mona. (2) Culebra Island. The following areas of beachfront on the north shore of the island from mean high tide to a point 150 meters from shore: Playa Resaca, Playa Brava, and Playa Larga. (3) Cayo Norte. South beach, from mean high tide inland to a point 150 meters from shore. (4) Island Culebrita. All beachfront areas on the southwest facing shore, east facing shore, and northwest facing shore of the island from mean high tide inland to a point 150 meters from shore. 50 CFR 226.73 Mona and Monito Islands, Puerto Rico – Waters surrounding the islands of Mona and Monito, from the mean high water line seaward to 3 nautical miles (5.6 km).

REASONS FOR CURRENT STATUS: The decline of this species is primarily due to human exploitation for tortoiseshell. While the legal hawksbill shell trade ended when Japan agreed to stop importing shell in 1993, a significant illegal trade continues. In addition, there are serious attempts by Cuba, with support from other countries, to downlist hawksbills in Cuba to Appendix 2 of the Convention on International Trade in Endangered Species of Wild Fauna and Flora in order to make it possible to reopen trade with Japan and possibly other countries. Other threats include loss or degradation of nesting habitat from coastal development and beach armoring; disorientation of hatchlings by beachfront lighting; excessive nest predation by

native and non-native predators; degradation of foraging habitat; marine pollution and debris; watercraft strikes; and incidental take from commercial fishing operations.

MANAGEMENT AND PROTECTION: Since hawksbills migrate long distances and co-mingle extensively on foraging areas, and since there are 36 geopolitical units in the Caribbean, implementing effective conservation measures in the Caribbean is complex and will require long-term cooperation between Caribbean nations for recovery efforts to succeed. The most important hawksbill nesting beaches in the Caribbean occur along the Yucatán Peninsula of Mexico. Several Yucatán beaches account for 25 to 30 percent of all hawksbill nesting in the Caribbean. Since 1985, the Fish and Wildlife Service has provided annual funding for surveying and protecting nests at three key beaches along the Yucatán Peninsula. Continued efforts are needed to protect nesting beaches; minimize the threat from illegal exploitation through intensified law enforcement efforts to curb the incidence of poaching and harassment; maintain the ban on international trade in hawksbill products; and ensure long-term protection of important foraging habitats by designating them as marine sanctuaries or as State, territorial, or Commonwealth aquatic preserves or sanctuaries.

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For more information please contact:

National Sea Turtle Coordinator U.S. Fish and Wildlife Service 7915 Baymeadows Way Suite 200 Jacksonville, Florida 32256 Telephone: (904) 731-3336

International Sea Turtle Specialist U.S. Fish and Wildlife Service University of West Georgia Department of Biology Carrollton, Georgia 30118-6300

Telephone: (770) 214-9293 Fax: (770) 836-6633

Fax: (904) 731-3045

